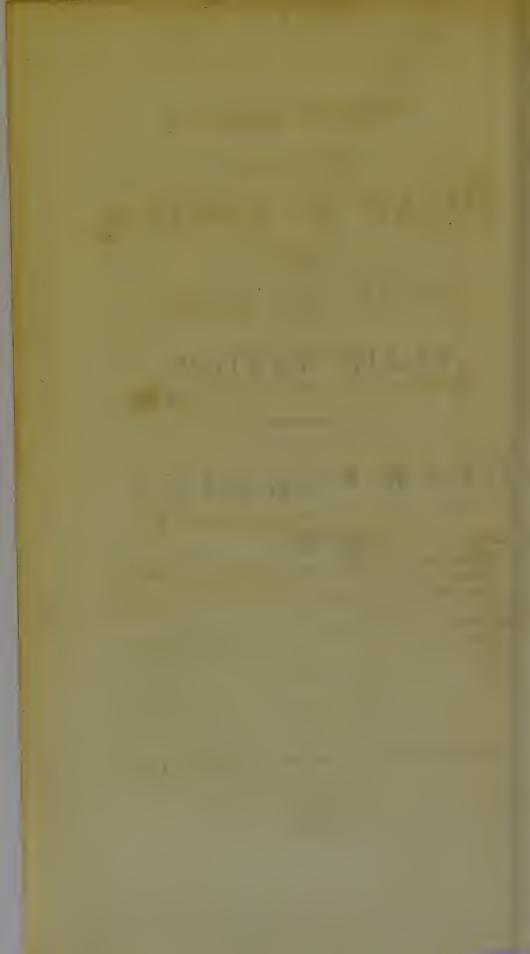


### PLAIN ADVICE

FOR ALL CLASSES OF

## DEAF PERSONS,

&c. &c.



### PLAIN ADVICE

FOR ALL CLASSES OF

## DEAF PERSONS,

THE

## DEAF AND DUMB,

AND THOSE HAVING

## DISEASES OF THE EARS.

## BY W. WRIGHT,

SURGEON AURIST TO HER LATE MAJESTY QUEEN CHARLOTTE,

Author of "An Essay on the Ear; ""An Address to Persons afflicted with Nervous Deafness;" "Observations on the improper Use of Mercury in Cases of Nervous Deafness;" "Editor of the Aurist or Medical Guide for the Deaf;"

Lecturer on the Anatomy and Physiology of the Organ of Hearing, &c.

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#### ADVERTISEMENT.

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As it may be some months before I shall be able to devote sufficient leisure, from my professional engagements, to translate the other parts of M. Itard's work, on Diseases of the Ear, &c. and to complete the remaining numbers of "The Aurist, or Medical Guide for the Deaf; I have, therefore, thought that some cautions and advice, devoid of technicalities, and in language as clear and explicit

as possible, may, in the mean time, not only prove useful to deaf persons, but be found interesting to general practitioners, and instructive to all classes. Should this Treatise effect the objects proposed, it will afford me much gratification.

#### W. WRIGHT.

15, Princes Street, Hanover Square.

#### PLAIN ADVICE

FOR ALL CLASSES OF

### DEAF PERSONS.

**-08** 

#### The Deaf and Dumb.

Too numerous are the unfortunate instances continually presented to our view, of children who, from the period of their birth, or very soon after, have been incapable of hearing any sound. Frequently this deprivation of the sense of hearing is not discovered until about the time the child is expected to talk, and there generally exists great uncertainty as to the precise date of the loss. The cause of the

deafness, in most cases, will be found to be improper treatment during the infantile state, or immediately upon the birth of the child, when, with well-meaning but erroneous solicitude, the poor infant is greeted with copious ablutions before the strength is equal to the operation; thus the circulation, which is only languidly beginning to perform its rotation, is interrupted by the latent heat being carried away too rapidly through the vapourization suddenly induced.

It is evident that Nature never intended any such process to be adopted, as a peculiar species of mealy covering is given to every part of the body, which, if the child is wrapped in fine cotton cloth, over which may be placed the usual flannels, will in a day or two, gradually rub off, and leave

the skin perfectly white and healthy. Even the membrane, commonly called the drum of the ear, is protected with an extra covering, which, in a short time after birth, is absorbed; and it would be almost as reasonable to have the ears of new-born infants syringed, first with water and then with brandy, as to subject the rest of the body, including the head, to similar ablutions, inflicted through the pertinacity and foolish prejudices of old-fashioned nurses. In vain will they argue, in support of their folly, that hundreds of children have been subjected to this method of treatment, and that no apparent inconvenience has accrued from it. Children are subject to many complaints, amongst which deafness and diseases of the ears are of very frequent occurrence: diseases of all descriptions

would assume a more mild character, and in many instances be totally unknown, if this practice were abandoned: even healthy children, whose innate strength of constitution enables them to bear, without any sensible injury, this violence of human folly, in its effort to surpass nature, would not only be quite as well, but (I am convinced) much better, without this superabundant care. Among weak or sickly children it is sure to occasion deafness, diseases of the ears, eyes, or glands, and, in many cases, death.

The foolish attempts of some parents to render their children hardy, as they term it, by exposing them to cold, damp, &c.; the incautious manner of washing, or, rather, the imperfect way in which the hair of children is dried after their heads have

been washed, occasions very many cases of partial and even total deafness. Should the question be asked why the children of peasants bear the same changes of temperature, a greater degree of exposure, and more privations, without any inconvenience; a reasonable answer is to be found in the luxurious intemperance and vicious habits of the parents of one class, contrasted with the simple fare, and untainted constitutions of the parents of the other. But it must be a subject of much regret to the observing mind, that the demoralization of the lower orders increases so rapidly, that in a few years, it is to be feared, the distinctions I have mentioned will be comparatively unknown.

It was discovered, in one instance, by examination after death, that the cavities of

the internal ear (in which the soft portion of the auditory nerve ought to be expanded in numerous ramifications) was solid bone. Opportunities do not frequently occur of obtaining this examination of the heads of deaf and dumb persons; but from those which have been afforded me, I am perfectly convinced, that the cases of the deaf and dumb have nothing in them so peculiar as to form a distinct class, and are only extreme cases of deafness, which commenced at a very early age. For children who never heard the human voice can have no power to imitate the sounds whereby we designate certain objects; and it is a fact well known in theory, and even proved by experiment, that there is no such thing as a natural language belonging to the human species. Therefore, persons, who have been deaf from such an early period of their lives, can only make their wants and sentiments known by a species of pantomime; still there is a great variety in the degrees of deafness in these children; some being able to hear a horn, whistle, or even a great exertion of the human voice; and these I consider very proper cases to receive the most sedulous and persevering professional care and attention, as they hold out a fair prospect of affording the highest gratification to a parent, and fame to the practitioner, by successful results.

A further convincing proof that many of these children are not born totally, or even at all deaf, is to be deduced from their imitation of various sounds, which at some time or another they must have heard, or they could never imitate. For instance the words papa, mama, &c. are commonly used to children in the most early periods of infancy, and the child must have heard, or it could never intuitively utter them: I have had many children brought to me who were, at the time I saw them, almost wholly deaf, and were said to have been born so, yet these children could pronounce various words, and one or two would place a bugle horn to their own mouth, and though they could not make it sound, they would imitate the noise in some degree; it is a well-known fact, that children hear and understand long before they can talk, and the circumstances which I have cited clearly prove, that these children, at least, were not born deaf, but were more probably the victims of inconsiderate care. Others of the deaf and dumb cannot hear any sound, unless some substance is struck with which they are in contact: this is not hearing, but the sense of feeling from the extremities of the nerves: and these cases in general do not admit of so great hope of relief, though I have met with some, even of this description, on whom I have conferred the sense of hearing in a considerable degree.

An extraordinary instance of this delicacy of feeling is, I am informed, to be found in the case of a Mr. Arrowsmith, who was (as it is said) born deaf and dumb, and has published a work to assist the education of those in the same situation as himself. This gentleman, by keeping his finger nails long, which he fixes against the wood-work of a room, can dis-

tinguish and enjoy the various tones and beauties of music.

## The Deaf and Dumb Asylum.

Many persons think, that at the Deaf and Dumb Asylum, the children receive medical assistance, with a view to relieve them of the extreme deafness under which they labour. This, however, is not the fact. It was proposed by his Royal Highness the Duke of Gloucester, that I should attend the children in the Asylum, as Surgeon Aurist, which duty I offered to perform gratuitously. I have in my possession the answer of the Committee, which was sent to his Royal Highness, and by his command forwarded to me; in which it is distinctly stated that no medical treatment whatever is allowed to be adopted in regard to the deafness of the children, who are placed in the Asylum for the purposes of education alone.

# Erroneous Treatment of the Deaf and Dumb.

It has been asserted that blisters, bleeding, setons, mercurial pills, (such as the blue pill, &c.) and the whole routine of antiphlogistic treatment, will give the sense of hearing and the faculty of speech to those born deaf and dumb. But there never has been one case brought forward which would bear investigation, that any child was even benefited by these means; and although a variety of attempts have, from time to time, been made, to induce

the public to believe that many persons were thus restored to the blessings of social intercourse, the very nature of the remedies employed is sufficient to convince every reasoning mind that such a result is not only improbable but almost impossible. Let not, however, this question, which is so interesting to the community in general, rest upon the mere assertion of any person, who may wish to make such a circumstance the herald of his own fame, but let the facts be investigated by some of our medical societies, let proofs be adduced of the state of the patients before treatment, which should be verified by competent and respectable medical gentlemen. This, with well authenticated statements as to the acquirement of the sense of hearing, &c. by these patients reported to have been thus cured, would be satisfactory.

Observations on the Case of CLAUDE HoNORE TREZEL, a Boy said to have been
born Deaf and Dumb, but to whom
Dr. Deleau the Younger asserts he has
given Hearing and Speech.

On the 10th of May, 1824, M. Percy called the attention of the Royal Academy of Sciences at Paris to the case of the above boy, who, it was stated, had been born deaf and dumb, but was now gifted with hearing and speech. Dr. Deleau proposed to give him instruction during twelve months, at the end of which period he presented the boy to the Academy, and a report was made on his case in June,

1825, which states, that although the boy can hear all kinds of noises and some intended to the sense of hearing, an immense interval separates him from children of the same age in whom the organization is perfect; that his manner of pronunciation is very defective and disagreeable, and occasions considerable contortions of the lips, tongue, &c.

By this and other reports I have received upon the subject, it appears that this boy is still very nearly, or quite, in the same state as he would have been if he had been wholly deaf, but had received the instruction which most of our scientific teachers of the deaf and dumb could have afforded.

I shall now consider the nature of the operation whereby this cure is said to have

been performed. In the Report from the Royal Academy it is stated, that the operation had in itself nothing new, and was as simple as possible, and consisted in aqueous injections into the Eustachian tubes, by means of a little flexible probe.

Dr. Deleau, in his account of the operation, says, that his first examination was sufficient to announce the approaching cure of the deafness; that his probe had penetrated into the cavity of the tympanum, enlarged the Eustachian tube, and assisted him to convey air almost into the above cavity.

I presume to question the correctness of this statement, which seems to be made up in a very slovenly manner, too much in the veni, vidi, vici, style. In the first place, the word sonde is used, which certainly does not convey the idea of a tube, and

yet a tube must be the article that was used, otherwise, how could it be pretended that the aqueous injection passed into the Eustachian tubes? Secondly, it is not stated whether the injections were attempted by the way of the nose or mouth, upon both of which operations I have made remarks in the subsequent pages. Thirdly, if a flexible tube was the instrument used, it would deceive the operator, as no flexible tube can be constructed that will keep the proper curve. I have, several years ago, employed our first surgeons' instrument makers upon this very instrument, but all their endeavours have hitherto been vain. Recently I had some made for a gentleman of considerable science, who tried the operation upon himself, and, at one time, imagined he had succeeded in introducing the instrument into the Eustachian tube, and he sent for me to witness his success. I soon satisfied him that he had deceived himself; and he derived no advantage from the operation, more than a gargle would have produced.

Persons acquainted with the anatomy of these parts of the body will be convinced that Dr. Deleau labours under very great error, as they must be quite satisfied that no human being ever did, or could, pass a probe or tube up the Eustachian tube, almost into the cavity of the tympanum. Let any one examine a skull, and it will be seen that, even when the whole of the integuments are removed which line the bony portion of this passage, it is still too small to admit more than a large sized wire, and so situated, that no instrument

can be introduced either by the nose or mouth; when the cartilaginous part is attached, the orifice of this tube is nearer to the passage of the nose, and may then be reached, but no flexible instrument could be made small enough to enter it, that would not (even if it reached the orifice of this tube) bend as soon as the necessary force became exerted in order to cause it to enter, and so deceive the operator.

Dr. Deleau, in his publication of this case, in a small book which I have just received from Paris, has taken great pains to introduce the names of barons, counts, prefects, and doctors in medicine, to whom he has made statements of this case, which they no doubt believe, as well as himself. Great names and high sounding titles may have influence over vulgar minds, but not

over the opinions of men of science, who will consider the subject anatomically, and judge accordingly.

Every fanciful discovery pronounced to be new, although at variance with common sense, sound reason, or scientific knowledge, has, for a time, its supporters. We find, upon referring to the first experiments made with electricity, in order to relieve disease, that the most wonderful cures were said to be performed through its agency, most of which were highly exaggerated, or mere temporary effects arising from the influence of the mind over the body. Similar benefits, it was then pretended, were conferred by galvanism, and various other methods of treatment; all which statements were supported by the opinions of the first men of science, although they were afterwards ashamed of their own credulity. To come more closely to the point as to Diseases of the Ear: Did not the Royal Society of this kingdom confer a medal upon Sir Astley Cooper for discovering the method of puncturing the drum of the ear? Was it not so confidently asserted to be a cure for a certain kind of deafness, that surgeons in all parts of the world were on the look out for patients on whom they might practise it? And what is the result of this discovery, which was said to form a new æra in surgical science, as to this class of diseases? It is now proved to be not only totally useless, but even injurious!

The real fact, in regard to Dr. Deleau's patient, Claude Honoré Trézel, appears to be, that he is one of that description which

I have before mentioned in the account of the deaf and dumb, who had a partial degree of hearing, and that the injections into the upper part of the throat have assisted to improve his hearing, in the same way as gargling would have done, but that the auditory sense is nevertheless still very imperfect, and that he is more the creature of education than any thing else.

In the Report from the Royal Academy at Paris it is observed, that there are numerous examples of children who are said to be dumb, merely from the want of a certain effort of the ear to catch the words which are uttered, and of a little labour (probably found difficult) of the larynx necessary to speech. Finding it more easy to communicate by signs, they neg-

speech, and are, therefore, classed amongst he deaf and dumb, when, in reality, they are neither dumb nor deaf.

The introduction of these observations nto the Report seems to indicate that the condition of this boy was held, by the Members of the Academy, to be that which I have just described. I have had, as patients, several children who had grown up to the age of six, seven, or eight years, and had been almost totally deaf, as it was supposed from their birth, yet, in two or three visits, I have extracted a filmy substance, exactly in the shape and size of the drum of the ear, which probably was the mucous covering given by Nature to the fœtus, but which, not being absorbed, or carried off by the little discharge that infants are subject to, became indurated: the removal, then, of this obstruction gave the sense of hearing. These cases have always appeared to me so simple, that I have scarcely thought them worthy notice.

It is quite amusing to observe, with what avidity this Report has been seized by a practitioner in this country, and paragraphs have been inserted into several newspapers, stating that Dr. Delean, of Paris, had cured a boy, aged nine years, who was born deaf and dumb; and that several cases of the same description in England have yielded to the judicious treatment of the advertiser.

This judicious treatment is stated, by himself, to consist in a reduction of the strength of the patient, by the antiphlogistic methods before-mentioned, and when

that is effected, and even "robust" persons nearly sink under it, bark is then ordered to restore the tone of the system. To imagine that such modes of practice can cure the deaf and dumb is almost as absurd as to fracture the skulls of patients of this description, because, about 300 years ago, a deaf and dumb man had the sense of hearing and the faculty of speech conferred on him in France by a blow from a cudgel, which produced a fracture of the cranium. However, after the truly ridiculous plans of treatment which have been proposed, it would not create much astonishment if other operations of a similar nature were to be advertised by some adventurer, as a certain cure for the deafness of all who would submit to them.

# Reasonable Methods of Curing the Deaf and Dumb.

THE only methods of treatment which I have found successful for relieving the deaf and dumb, have been to ascertain, as near as possible the precise date and cause of the extreme deafness; for, as I before observed, deafness is, in the generality of cases, the cause of the child being dumb. Dumbness certainly is discovered in some who are not deaf; but this arises from want of intellect. Having thus satisfied myself, as much as can be done, with respect to the cause of the deafness, I proceed to treat the complaint with remedies which, I believe, are appropriate to the case—in no instance over exciting either

but, by mild and gentle treatment, assisting nature to obtain the exercise of those functions for which these parts of the body were formed. By methods like these I succeeded in giving the sense of hearing and the faculty of speech to Miss Thatcher, whom I had the honor of presenting to her late Majesty, Queen Charlotte, and some other branches of the Royal Family now alive. A portrait of this young lady appeared in the Gentleman's Magazine for July, 1823.

Several other cases of this extreme deafness I have succeeded also in relieving; of which I have ample proofs: and am quite satisfied that if an Institution were formed, where children of this description could be subjected for a sufficient time to the treatment I propose, (which is neither painful nor injurious) many might be gifted with the full exercise of hearing and of speech.

#### Total Deafness from Scarlet Fever, &c.

FEVERS of this kind frequently produce extreme, and sometimes total, deafness; for the ulceration of the throat, which is an usual symptom, extends up the Eustachian tubes, (the internal passages leading from the throat) and in the process of healing the ulcers, the orifices of these tubes close; or else a quantity of cheese-like substance is deposited in the cavity behind the drum of the ear, and in some cases destroys the drum itself, and brings away the small bones that are attached to it. In cases of this latter kind very little more can be

effected towards a cure than to remove the tendency to discharge, should any still remain; but where the cheese-like substance is in the cavity before named, if the membrane be only partly destroyed, the hearing may be much restored, as it also may when the Eustachian tubes are closed at their orifices, provided the membrane called the drum is only in the above state. But when the small bones and the drum of the ear have beeome detached, through the excess of the ulceration, all that can be done is mere palliative treatment, tending more to remove the personal uneasiness attending a continuance of the purulent discharge than to improve the hearing.

Persons who are totally deaf from fever, if it oecur at an early age, gradually lose the power of modulating the voice, and,

at the end of a few years, cannot be understood. Yet a case has been published of a young man, aged 19, who, from an attack of inflammatory fever, had been deaf and dumb 13 years, but was restored (as it is said in an advertisement) to hearing and speech by the before-mentioned antiphlogistic means. So that, though he lost his hearing at a time when he was only just acquiring language, (viz. the age of six years) it is pretended that the above treatment gave him hearing and speech. From the nature of total deafness occasioned by inflammatory fever, which I have endeavoured to explain, persons of common sense will see that such a cure is impossible.

I was called in by the physician in attendance, a short time ago, to the child of

a lady of distinction, then suffering from scarlet fever. The ulceration of the throat had attacked the ears, from both of which issued a most profuse purulent discharge.

I attended regularly until the child was able to sit up, by which time the discharge was completely cured, and the sense of hearing saved: and there is no doubt but that if proper methods were adopted, in the generality of these cases, the deprivation of hearing would be prevented.

## Cow Pox, Small Pox, and Measles,

Are all productive of deafness and other diseases of the ears. Most of the effects arising from the first are purulent discharges, with or without fungous granulations in the auditory passages, and

sometimes fistulous openings or perforations through the drum of the ear, which, if left without surgical aid for any length of time, are very difficult to cure.

Small-pox pustules often form in the auditory passage, and the diseased skin thrown off forms a mechanical obstruction to the entrance of sound. But I have always found that the full sense of hearing returned as soon as the substance was extracted, several specimens of which I have preserved.

Measles, as well as small pox, also occasion deafness, for which, sometimes, no specific cause can be discovered. Therefore it can only be treated in the same way as other kinds of deafness, with remedies appropriate to the existing symptoms.

#### Closure of the Eustachian Tubes.

THESE are passages leading from the upper part of the throat, nearly even with the middle part of the nose, in a slanting position upwards to the cavity, immediately behind the drum of the ear, and their orifices become more or less closed through the ulceration occasioned by scarlet fever, ulcerated sore throat, syphilis, scrofula, measles, &c. The drum of the ear, in consequence, having no inlet for air to its internal surface, cannot vibrate; and deafness, in a greater or less degree, proportionate to the injury these parts have sustained, is the result.

#### Perforation of the Drum of the Ear

Was proposed by Sir Astley Cooper as a cure for cases of this last description. He made a communication of this new discovery to the Royal Society, and on the 30th of November, 1801, the Copleian Medal was conferred on him, preceded by a complimentary speech from the President, eulogising this new improvement in surgical science. Most young surgeons were, in consequence, stimulated to follow the plan, and became emulous to boast that they had performed the same operation which had gained so much credit for the then Mr. Astley Cooper. The drum of the ear was punctured in thousands of cases, without any discrimination as to the

cause of the deafness, and numbers were rendered incurable that were not so originally. A variety of instruments were invented for the purpose, and the most ridiculous tales were told by some surgeons to patients, that they had a bladder of wind or water in the ear, which, being pierced, hearing would instantly return. Indeed, in most new modes of treatment, if they are only backed by the name of some person who has obtained the good opinion of the public, there are always professional men to be found who will adopt them because they are either too indolent to think for themselves, or are afraid to oppose the opinions of a great man, however erroneous those opinions may be.

In 1817, contrary to the advice of my medical friends, I published observations

upon this plan, and demonstrated that, not only upon every principle of chemical, mechanical, and anatomical reasoning, but also from the uniform unsuccessful results of the operation, it ought to be abandoned by every rational surgeon. A copy of which work I sent to Sir Astley Cooper.

I am happy to bear testimony to the liberality of sentiment displayed by that gentleman, for I have not only received verbal, but written requests from him for my advice in cases of deafness and diseases of the ears, when even surgical operation was unfortunately necessary. Notwithstanding this tacit abandonment, and the repeated instances of injury, arising from the operation, of which too many subsequent examples may unhappily be adduced, it was not reasonably to be ex-

pected that any recent publication would recommend such a mode of proceeding; yet, in one published at Hull, and another by a medical gentleman residing in the country, it is spoken of in terms of commendation, as a new invention. This, however, is not the fact. It is, on the contrary, a very ancient idea, the origin of which is forgotten: Rielan, however, about 200 years ago, recommended, in his work, entitled " Opera Anatomica," that in certain cases of deafness, the membrana tympani (vulgarly called the drum of the ear) should be perforated. Julien Busson, in 1742, also advised it; G. Cheselden proposed to make the first experiment on a criminal, but the commiseration of the English nation prevented it from being performed. A. M. Himly, also, who claims

the priority as to this operation, which is now found to be worse than useless, has published a dissertation on the subject.

#### Relaxation of the Drum of the Ear.

When persons hear better in a coach, or during the continuance of any loud noise, it is a symptom of the above state of this fine membrane, which sometimes is caused by general debility of the system, but more frequently from the pressure of the whole volume of air forced from the lungs against this delicate part, through the Eustachian tubes. For many persons who are slightly deaf from catarrh, finding relief from closing the mouth and holding the nose, in order to force air through these internal passages, acquire a continual habit of doing

so, by which they increase, for a short time, the sense of hearing. If the Eustachian tubes are free of obstruction, this local force, continually repeated, by degrees increases the relaxation; they are then obliged to repeat it more and more frequently, until at last the deafness is almost total, and becomes most difficult to relieve: even the violent manner of blowing the nose, which some persons get into the practice of doing, will produce pain, and, by degrees, the same effect.

## Rupture of the Drum of the Ear

Is occasioned from external causes, such as a blow on the ear, by which the air is suddenly condensed in the auditory passage. As an instance, see the case of the

late excellent comedian and worthy man, Mr. Knight (No. I. of the Aurist, p. 4.) It is also sometimes the effect of causes operating from the internal side of this membrane; such as a sudden fit of coughing occurring whilst a handkerchief is held to the nose and mouth. In one case of hooping cough, through the handkerchief being held in this manner during a paroxysm, the drum of the ear on each side was absolutely torn in the same manner, as a hole might be torn in a piece of paper by any blunt instrument. Inflammation succeeded, and a slight purulent discharge continued for a short time, which yielded to proper treatment, but the hearing was not so acute afterwards as it was before this occurrence, -indeed, it could not be expected that the drum of the ear would

be so sensible to sounds. The drum of the ear, if ruptured or pierced, will, in most cases, unite again without any surgical aid, although it will do so more favorably as to the hearing, if treated judiciously, as soon as the injury is discovered to have taken place.

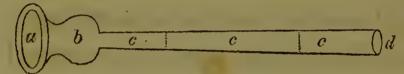
### Improper Correction of Children.

I have noticed this fully in the Aurist, No. I. p. 31. and conceive it will not be necessary to repeat what I have there mentioned. But, as cautions against an evil practice can never be too much impressed on the memory, Schoolmasters and Parents should know that polypi and fungous granulations in the auditory passages, abscesses, and purulent discharges,

producing caries of the bone, idiotcy, and even death, have occurred from the foolish custom of "Boxing the Ears" (as it is termed.) Those persons who do so, after seeing this caution, which is founded on actual observation, will feel deep regret, and consider themselves criminally guilty, should any of the evils I have mentioned occur to those on whom such a punish ment has been inflicted.

On the Method adopted for judging when the Eustachian tubes are obstructed.

CATARRHAL affections often occasion obstructions in these passages, and to ascertain whether such obstructions exist, patients are desired by some persons to hold the nose, close the mouth, and force air as it is called, the drum of the ear. No method can be so erroneous or contrary to all principles of science. A taper glass tube, with an open cavity at the end of it in this form



will elucidate my argument against the above method of forming a judgment on this subject. Let the orifice a be covered with a piece of fine bladder securely fixed on, which is to represent the drum of the ear. The bell shaped cavity b to represent the tympanum, or cavity inside the membrana tympani, or, as it is called, the drum—c c c, the Eustachian tube.—d, the orifice of the Eustachian tube in the throat. Let this tube be filled with mucilage from

one dotted line to the other, apply the mouth to the end d, and by using the force of the lungs you may condense the air in the cavity b, and the bladder will be pressed against, and assume outwardly a convex form. But as soon as you withdraw the pressure of air from the lungs, the bladder regains its form, the mucilage moves back to its place, and all is as before you began. So it is with the ear; and neither patient, nor practitioner, are any the wiser for the experiment. This betrays such a want of knowledge of the properties of air, that it has excited much astonishment in my mind, to hear men, who have attained eminence as general surgeons, and physicians, commit themselves upon this subject; when a mere child, acquainted only with the rudiments

of natural philosophy, provided the anatomical situation of the parts were shewn and explained to him, would convict them of error, and prove that they were totally unacquainted with pneumatics. I have entered more fully into an explanation of this matter than I should otherwise have done, in the hope of preventing patients from flattering themselves that they have a sure criterion, whereby they can ascertain when the Eustachian tubes are, or are not obstructed; for it really seems, that this method of forming a judgment had become very general, as few days pass without one or two patients calling the folly of it to my recollection.

### A Watch held in the Mouth or between the Teeth in contact with the Ear

Is another erroneous method of judging of the obstruction of the Eustachian tubes, and like a watch held in contact with the ear, is *feeling*, and not *hearing*.

## Collection of Purulent Matter in the Cavity inside the Drum of the Ear

Is the sequel of inflammation and ulceration affecting this internal cavity from more remote parts, which occasions most intense pain, by the increasing quantity of matter pressing against the drum of the ear on its internal side, and also against the fine membranes which close the round, and

oval aperture leading to the depository of the soft, and highly sensitive portion of the auditory nerve. The origin of this is the complaint commonly termed a cold, which producing first, congestion of the finer vessels that carry on the circulation, inflammatory action follows, attended with great secretion from the mucous membranes lining the internal parts of the ear, the fauces, and the nose, and a degree of soreness about the upper part of the throat. This indicates that the Eustachian tube, or tubes, are in a state of inflammation and tumefaction, whereby they are rendered much smaller, and incapable of allowing a passage for the increased secretions, and so the accumulation of the matter in the cavity mentioned becomes continually more considerable and acrimonious, until the

drum of the ear gives way, when the pain abates, and the matter passes out through the opening into the external auditory passage. These symptoms require very decided, and active general antiphlogistic treatment: nothing stimulating should be applied to the part. Yet, the contrary practice too often prevails, and is persevered in, until the most judicious professional attention will not, in some instances, prevent

#### Purulent Discharges

OF a very unpleasant and dangerous description from supervening, which, if neglected, or improperly treated, assume sometimes such a chronic character, that it is almost impossible to stop the progres-

sive evil hereafter mentioned. Some works written, as it is said, to instruct young men who are entering the profession, direct stimulatives to be used in these cases; and there are persons who will follow blindly the dictum of these book-makers (who know nothing of the subject on which theywrite) and apply in consequence oils, balsams, and spirituous preparations, amongst which laudanum holds a primary rank. An honorable apothecary or surgeon, if he has not experience in such cases, will call in the assistance of persons who devote their attention to this department; and even those, who advise the case to be left to nature, (because they do not know how to treat it) are less culpable than the person who uses remedies of such a description as he would not apply to any other part of! the body similarly situated. The consequence of improper treatment is, that the patient proceeds from bad to worse, until

Fungous Granulations of Flesh, which fill up the Auditory Passage, are the Result.

The deafness, which in the commencement was but slight, is very much increased, the discharge assumes a red appearance, or is streaked with blood, and attended with deep seated lancinating pain. These are dangerous symptoms, there being many instances of deprivation of life, in a very short space of time after these bleeding fungous substances began to show themselves. I have been frequently called in to cases of this nature,

and in every instance have arrested the progress of the disease, although frequently too much injury was done to the internal part of the ear for a restoration of hearing to be possibly effected. When the fungous granulation has not assumed this virulent character, the case is more likely to be cured, and the hearing to be restored. I have, during the period of nearly four years, abandoned the old plan of extracting these substances by the forceps, having found my new method of treatment with dried alum completely successful in every case to which I have applied it .- (For full particulars, see Aurist, No. I. p. 18.) It must be observed, however, that some patients have applied this preparation themselves, with too much force, and it could not then produce the desired effect. To one gentleman, who was sent to me by Sir Astley Cooper, I prescribed it, and instructed him, as I thought, sufficiently in the manner of using it. He went into the country, however, for a month, and on his return I examined his ear, which was not amended. I requested him to shew me how he applied the preparation, and discovered that he was in the habit of pressing the alum down with the stick of a camel's hair pencil: his error was pointed out to him, and he then got well in about three weeks.

Polypus in the external Auditory Passage.

A young lady, sent to me, also, by Sir Astley Cooper, had a small polypus in the auditory passage, which she was very unwil-

ling to have extracted. By her urgent wish I repeated the trial, which I had before made unsuccessfully, of the efficacy of dried alum in cases of polypus, but, as I expected, it did not succeed; and at last she consented to the operation. In consequence of the polypus having a very small point of adherence to the side of the auditory passage, the pain of extracting it was extremely trifling. Indeed, although the operation appears alarming, yet, by the aid of well constructed instruments in the hands of a competent operator, the pain is in reality very inconsiderable.

Practitioners who have not much experience in these diseases of the auditory passages, often denominate fungous granulations, a polypus, and vice versa. During my late visit to Bristol, I saw two

instances of the kind; one, a gentleman then under the care of an aurist, whom he had visited in London at intervals, and corresponded with for about three years. This patient was told that he had a polypus in his ear, when in fact it was merely fungous granulations of the least virulent description, and the treatment which had been advised was most inefficacious and unscientific.

Another, a young woman with a large polypus in each ear, stated that she had been under the care of an apothecary or surgeon at Bristol for above three years, who told her that they were pieces of fungous flesh which went through into her throat, and that it would be very hazardous to her life to extract them. If any professional man did resort to such a spe-

cies of intimidation to hide his own want of knowledge, or experience, it was extremely reprehensible; as no danger whatever could be apprehended from the operation, if properly performed. I think, however, that there must have been some misunderstanding between the patient and the surgeon, or misrepresentation in stating the case to me. Persons who belong to the lower orders of the community, are too fond of depreciating to any new medical attendant, the last professional man who has unsuccessfully endeavoured to assist them, though probably that assistance has been afforded them gratuitously.

## Abscesses in the external Auditory Passage.

Phlegmons, or boils, are very common diseases of the external auditory passage. They occasion great pain whilst they are proceeding towards suppuration, and the discharge, after the skin breaks, sometimes lasts a considerable time, unless proper treatment is adopted, which, as far as can be done without surgical assistance, I have pointed out in No. I. of the Aurist, p. 8.

A young gentleman had a trifling pain in his ear; he rubbed the part, the pain and swelling increased, and probably a boil was forming, of which another instance occurred in the same family. Some one advised oil of cinnamon to be applied in very small portions; the directions, however, were not attended to, for a considerable quantity was used, and also the garlic and oil advised some time ago in the newspapers. The effect of these applications was the formation of fungous flesh at the lower part of the auditory passage, with a most acrimonious discharge; and the patient being a fine healthy boy, of a full plethoric habit, constant surgical attention was requisite for some time, in order to overcome the disease thus excited.

## Imperforation of the external Auditory Passage,

Is not a case that often presents itself. I have seen some instances, one of which is mentioned in my Essay on the Ear. As, however, surgical skill only, can assist persons thus situated, I have thought proper to avoid enlarging this work, with any observations on the subject.

# Contraction of the external Auditory Passage,

Is common from the use of stimulatives in cases for which they are improper. A thickening of the membraneous, and cartilaginous lining of the auditory passage,

and consequent contraction of it, is often thus produced. I have seen some patients who had the auditory passage nearly closed from this cause; and though the sides of the passage so permanently tumefied were very sensitive, yet, nothing that I ever yet applied, or heard of, was capable of relieving them. I entertain great hopes that iodine will prove the desideratum, if applied with great care. I had a case of a lady, about three years ago, with fungous flesh in the auditory passage, and a contraction of it; she had also a large tumefaction on the posterior part of the mastoid process (the protuberant bone behind the ear.) The medical gentleman who attended her, and recommended her to me, ordered iodine in small doses, from which much benefit was derived, but she was too impatient to await its effects on the tumour, which was beginning to alter in
texture, and would probably have dispersed; I, therefore, assisted in the extirpation of it. The ear became quite healthy,
regained its original form, and has continued so ever since; but, whether this was
in consequence of taking the iodine, it is
impossible to ascertain; indeed, at the
time, I was more inclined to consider the
improvement, as being derived from other
causes.

Sometimes the contraction of this passage is natural from birth, and then it is mostly a malformation of the bone which cannot be altered.

A general surgeon, some time ago, departed from his own line of practice to write in favor of a solution of lunar caustic in these cases, probably supposing that this contraction was a species of fungous formation, whereas nothing can be more erroneous. But after the injury which it did to the Duke of Wellington, and others, (particulars of which I have given in No. II. of the Aurist, p. 47.) to whom it was applied for an imaginary species of diseased action, I hear no more of any attempt being made to defend, or recommend the use of a substance, capable of inflicting so much injury, and which, in no one instance, ever effected a cure, or even afforded relief.

### Indurated Wax in the Auditory Passage

Is frequently the cause of great diminution in the sense of hearing, which is more or

less in proportion to the nature of the mechanical obstruction. The cerumen (or wax) becomes sometimes so extremely hard, that it requires the use of solvents for several hours, before it can be extracted; and I have had cases where, from its hardness, it produced inflammation, and ulceration of the auditory passage, which was attended with great pain. At other times, the substance is of a fibrous or laminated nature, and, in a few instances, it appears to form a kind of irritating substance, which obtains for itself a coating, probably by de taching the fine cutis, lining the auditory passage, of which it gives a complete model when extracted. This was the case of a gentleman in Pall Mall, who had been from 70 to 75 years deaf on one side, but was restored by the removal of the obstruction, which I have now in my possession.

Deafness occasioned by hard wax, may be cured by warm water put into the ears every night for a length of time, or by soap and water, or by infusion of poppy heads, such as was used by the old man at Fulham, whose case was mentioned in the Times newspaper, or by an hundred other applications, some of them whimsical in the extreme, provided they are capable of acting as solvents; for it is their mechanical, and not their medicinal properties, that give relief. Thus, many substances acquire celebrity as popular remedies for deafness, but being applied to cases of a very different description from those where indurated wax is the cause of the deprivation, they often increase the complaint, and render it much more difficult, nay, sometimes prevent the possibility of a cure.

Even preparations which are very excellent as solvents of indurated wax, render persons who apply them to those very cases more deaf: the reason of which effect is, that, as the indurated or filmy substance softens, it naturally absorbs the liquid, and must become larger, thereby presenting a greater mechanical obstruction to the entrance of sound. This is an effect which I always prepare my patients to expect, whenever I give them a prescription, or any preparation intended to soften the wax, and render the extraction of it by syringing more easy to them.

#### As to Syringing the Ear.

IT may be requisite to say a few words on this head. The operation is not attended with the least pain, if properly performed; yet I frequently hear statements of a very different description from patients who have had their ears syringed by apothecaries, and surgeons. Very recently a gentleman of rank consulted me, who had suffered pain for several weeks through his ear having been syringed too violently. Violent syringing can neither be useful, nor is it necessary. It is by proceeding upon a competent knowledge of the hydraulic powers, that any substance which is not attached to the lining of the auditory passage, can be easily extracted; and, without that knowledge, I will venture to affirm, that a person might take the syringe, which I have much improved for my own use, and constantly syringe the ear for months, yet not be able to extract the substance, which, by the first syringe-full of liquid, can be effected without giving pain, whilst he would give pain every time he used the instrument. In all cases I recommend patients to syringe their own ears with the syringes mentioned in the succeeding pages, sooner than trust to persons who are incompetent, from want of experience.

When too stimulating or acrimonious substances have been applied to the auditory passage, or there has been diseased action therein, syringing merely with warm distilled water or any lotion will produce vertigo. This is occasioned by the fibres

of the external auditory nerves, which are diffused in this passage, having been injured or rendered more susceptible through the previous ulceration, or other excitement. An instance of this kind occurred lately .-A lady had been troubled for a short time with deafness, for which she consulted a physician, who attended the family where she was visiting: he advised her to apply opodeldoc to the auditory passages. She only applied it once, which caused much pain; and when I examined her ears, I found the auditory passages considerably inflamed, and the cutis, in some parts, raised into a vesicle.—The case was indurated wax, and nothing could display ignorance, or carelessness more than recommending such a remedy, although it was a Fellow of the College of Physicians who did so. On syringing the ear in the most gentle manner, vertigo supervened, which would not have been the case, provided this stimulating liquid had not been used.

### Insects in the Auditory Passage.

These are common occurrences, but it is right for the public to know that the remedy is always within reach, viz. fill the auditory passage with sallad oil by dropping it in. This destroys the life of the insect, and it may then remain in the car without occasioning any injury, until the person has an opportunity of consulting some professional gentleman conversant in matters of this nature, who will soon extract the intruder without the least pain.

I have a wasp that I extracted nearly

ten years ago from the ear of a young gentleman of Bridgewater, where it had remained during a period of five years. I had a letter from him within these few months, and he continues to hear perfectly, and has never suffered the least inconvenience since the insect was removed.

Substances placed in the Auditory Passage by Children.

Peas, cherry-stones, small shells, lupin seeds, and various other substances, find admission into this passage, through the playfulness of children; all these are easily taken out by a small hook, which I have contrived for the purpose, without giving the least pain, or producing any injury. But I have seen instances where the im-

proper use of forceps, had occasioned fungous granulations to form over the substance, thereby making the case much more complex and difficult.

## Cleansing the Auditory Passage with Instruments called Ear Picks

Is a very bad custom, and frequently the cause of excoriations of the auditory passage. Cotton wool should always be wrapped round the instrument, to prevent the metallic substance from injuring the ear. But a small silver instrument which I have invented answers the purpose much better, as it neither risks giving pain; nor suffers the cotton to be left in the ear, which, though in my opinion a trifling consideration, as there is no difficulty in

removing it, yet sometimes occasions unpleasant sensations, and if a surgeon be consulted who is not experienced in the treatment of complaints of the ear, pain, and even failure of its extraction is often the consequence.

Mr. Weiss, in the Strand, and Kooystra, 69, Oxford-street, always keep the instruments above named; but the plan is so simple, that any surgeon's instrument-maker can manufacture them.

Using Pins, Needles, &c. to pick the Ear.

This habit is adopted by many persons particularly amongst the lower classes of society, and is still more prejudicial and dangerous than the "Ear picks." A lady was said to have died at Tunbridge (I be:

lieve) through picking her ear with a needle. This, if it did occur, must, I conceive, have been through the instrument piercing the drum of the ear, and the opposite small branch of the internal artery. The same effect might be caused if the drum of the ear was punctured by an unskilful person.

In May last, it was stated in the newspapers, that a servant at Lincoln, had picked her ear with a pin, that the head of the pin came off, and lodged in her ear, which occasioned dreadful agony. The master of the servant wrote to me, stating that the poor girl was better, and was discharged from the infirmary, but that the pin's head was still in the ear, and that she suffered great pain and deafness. I offered to attend her gratuitously, if she could come

to town; but her friends could not afford the expence of the journey.

Hildanus relates a case of a girl, who not only experienced an interruption of the usual functions of the body, but had paralysis in consequence of a glass bead getting into, and remaining in her ear; all which symptoms disappeared as soon as the extraneous body was removed. I have seen cases of very severe pain, which produced fever, originate through injuries inflicted on the drum of the ear; indeed, any extraneous hard body remaining in constant contact with that sensitive membrane, would, to a delicate patient, occasion very serious inflammation, which might extend even so as to affect the life.

Most of these extraneous substances are easily taken out, provided the ear has not

been irritated by injudicious attempts to extract them; I took out of the ear of a gentleman, recently, the point of a black lead pencil, which broke whilst he was picking his ear with it, and having descended down the auditory passage occasioned him much inconvenience. And still more recently, I relieved a young gentleman of deafness and pain, by extracting a grape-stone from the bottom of the auditory passage.

Wool, Sponge, &c. placed in the Ear.

Black sheep's wool, and cotton wool, are used by many persons, either for the medicinal quality supposed to be in the first, or to convey oils, &c. into the passage of the ear. Tents, or dossils of sponge, sa-

as the ointment cools, into small compass, are also sold to put into the ear. These sponge tents are, as it is said, to expand the ear, and the cerate (I believe) has also some pretended power of curing deafness. All these substances are liable to descend down the auditory passage; and sometimes, it being supposed they have fallen out, they become hard through absorbing the secretions of the ear, and are not only the cause of deafness, but also of much pain and inflammation.

I was sent for very late one night to attend a lady, who had been suffering most agonizing pain for ten days in her head, ear, and face. She was attended twice a day, by, I believe, two medical gentlemen. The usual course of antiphlogistic treat-

ment was adopted, together with a constant repetition of fomentations, and nature was quite exhausted for want of rest, which opiates had ceased to procure. On examining the auditory passage, as well as I could by candle-light, I saw a substance a considerable way down: by syringing with a warm lotion, I brought it nearer the orifice of the passage, and extracted with the forceps, a large piece of sponge. She went to bed immediately afterwards, passed a comfortable night, and arose in the morning quite free from pain, and as well as could be imagined, after the unnecessary medicine which she had taken .-This sponge, if I remember rightly, was one of a box full prepared for her by her apothecary, for the purpose of dilating the

passage of the ears, which he told her were too small.

## A Noise like a Crack or Report in the Ear,

May arise from a dislodgment, or change of the position of the cerumen or wax in the external auditory passage, which sometimes closes the passage more completely, or descends downwards, and touches the drum of the ear, and thereby increases the deafness. At other times it leaves the passage more free, and the hearing in consequence improves.

### Deafness from Catarrh, or a Cold.

THE noise just mentioned, or a squeaking, or singing, or blowing the nose, yawning, or sneezing, are very commonly symptoms of this complaint. The sensation is occasioned by an alteration in the position of the mucus, which obstructs the more external part of the Eustachian tubes. The deafness, in these cases, is often removed by the adoption of proper and reasonable methods of curing the catarrhal affection, which gave origin to it; or very shortly after those symptoms disappear, and the reason is evident, for, as the defluxion ceases, the absorbent vessels carry off the accumulation. Should, however, the deafness remain some time after the first cause

has ceased, competent assistance should be obtained, as most cases of deafness may be cured, if proper methods are adopted in an early stage of the complaint; and with children the result is successful in the proportion of, (I think I may safely say) nine instances out of every twelve.

# Want of Cerumen (or Wax) in the Auditory Passage.

Cases of this description continually present themselves. In some the ceruminous glands have not entirely ceased to perform their office, but act very languidly: these, if the patients be young and healthy persons in other respects, and the diminution of hearing has not been of long standing, are in general speedily relieved. Persons

more advanced in life, whose deafness is of long standing, cannot reasonably expect such expeditious relief. And when the constitution is in a debilitated state, or every foolish remedy has been tried that ignorance could recommend, patients ought to be happy if a trifling increase of hearing can be gained, or even if their infirmity can be prevented from increasing. Although young persons (whose cases are of this description) will be more certain to obtain a cure than elderly patients, yet I have had the pleasure of relieving and curing many, from the age of 60 to 80, whose cases had been pronounced nervous and incurable.

#### Nervous Deafness.

This convenient word "Nervous" is indiscriminately applied to all the cases for which no other distinct cause can be assigned. Some patients, on being told that their case is nervous deafness, press the practitioner for further explanation, and I have heard of some professional men who, to avoid giving an answer upon a question, to them probably puzzling, have assumed a stateliness of demeanour and hauteur of manner, whilst others more communicative, or with a view to stop further inquiry, inform the patient they have discovered that the nerve of the ear is destroyed. Now the auditory nerves are four in number, consisting of two portions or branches on

each side, viz. the hard and soft portion, which are perfectly distinct from each other, except that they lie one over the other at their base in the brain. The hard portion is distributed not only in the external auditory passage, but also its ramifications extend all over the face, to the eye, nose, lips, and throat: in the course of its passage, its branches unite with branches of other nerves, which, in their various expansions, are diffused all over the system. And, although this hard portion must contribute to the perfection of the sense of hearing, as is evident from the effect produced by sudden sounds upon the heart, by increasing its pulsations, and upon the lungs, by altering the respiration, which is occasioned through its fibres forming a plexus, or union with the nerves of those

parts; yet, no one can produce any criteria to shew when this hard portion of the nerve ceases to perform its functions; and still less, can any person form even an opinion, as to the state of the soft portion of the auditory nerve, through which the sense of hearing is more immediately conveyed; for it is deeply concealed from mortal eye, within the recesses formed in the hard portion of the temporal bone, where its fine fibres float in a highly sensitive fluid. Therefore, unless after extreme ulceration has destroyed the membrane called the drum, and brought away the small bones attached to it, thereby removing from its place the stapes (a bone so called from its likeness to a stirrup) with its membrane which closes the oval aperture, and thus this sensitive liquid escapes

from its proper receptacle, no human being can, with the least shadow of truth, or reason, venture to assert, that the nerve of the ear is destroyed.

There are many cases which are denominated nervous by persons who are not acquainted with the subject, but which are, in reality, of a very different nature. I have seen and relieved persons, who had suffered as they supposed, and were induced to believe, incurable deafness, from four to even twenty years, during which time, blisters, bleeding, setons, blue pill, and the whole routine of antiphlogistic treatment were at intervals adopted. Yet the cases have been, in some instances, merely indurated wax, or cotton wool in the ear, or have yielded to mild and persevering efforts, to assist in restoring tone and energy to parts which were in a state of debility, and which the means previously employed were calculated still more to increase.

That paralysis of the accoustic nerve often takes place, I am ready to admit; but it is in most cases the sequel, or the attendant upon other more general aberrations from the usual healthy action of the system, and is not a local affection of the accoustic nerves alone.

When there is no apparent cause to be seen in the ear itself, sufficient to account for the deafness, excepting that there exists great debility of constitution, and general nervous irritability, the case is termed nervous deafness, upon which I shall

make some further observations, in the succeeding pages; and amongst other symptoms,

# Buzzing or singing Noises in the Head and Ears,

Are in almost every case of this nature, complained of as a great annoyance to the patient. But it is not uncommon for persons to have these noises, or a kind of pulsatory sensation in the ears, although the hearing is not at all diminished. These symptoms are, in general, occasioned by dyspepsia, or indigestion, to which cause almost every disease that can affect the system may be traced, and particularly those affecting the head, through which is constantly propelled so large a portion of

the blood, and in which the vessels are so be delicate.

Let any person of common sense look at the classification of diseases, and trace their origin; they will centre in this one grand cause, want of regular action of the organs of digestion, brought on by intemperance, sedentary employment, and consequent want of proper exercise, the use of violent medicine, which injures, instead of assisting nature, and the common practice of subjecting the body to sudden changes of temperature, or to the vapourization occasioned by damp air or wet clothes. These are the general and true causes of nervous diseases, as they are called, and amongst them nervous deafness; and the reason why patients have not been relieved more frequently of deafness, which appeared to

originate in some occult cause, has arisen rom this fact being misunderstood, and rom the disinclination of the patient to lter his plan of diet, or habits of life. He oo often looks upon the advice given, as nerely common place or unnecessary. Am ot I (says he) in a perfect state of health? Vhy then should I abridge my enjoyment f the pleasures of the table, or the bottle? let those, who thus disregard the warning iven by Nature, learn, ere it be too late, nat noises in the head and ears, either atended with deafness or without, are freuently symptoms of approaching paralys, which, in a moment, produces second nildishness, and mere oblivion; or of apolexy, which hurries the patient to that ourne, from whence no traveller returns.

I have seen many fine looking, and to

all appearance, healthy persons, who were thus, by their own obstinacy, either deprived of their usefulness in society, or snatched from a family that depended on their exertions for all the comforts, or necessaries of life; and from many, who would listen to conscientious advice, and whom I am now happy to rank as my friends, I have been fortunate enough to avert these evils.

It is not always that these noises in the head, attended with deafness, although of long standing, are occasioned by the last mentioned causes; for they frequently are the consequence of a kind of laminated, or fibrous secretion in the auditory passage, which, probably vibrating with the pulses of sound, produces an effect somewhat similar to wind passing either amongst trees, or

the rigging of vessels, or to the tones issuing from the vibrating strings of an Æolian lyre. These cases are cured with very little loss of time; indeed, in several instances, where the patients had suffered these noises from 20 to 25 years, they were relieved of them within as many hours, and the gentleman mentioned under the article "Indurated wax," who had been deaf 70 to 75 years, had had a "vocal performer," as he termed it, in his ear the whole time, of which, as well as his deafness, he was completely relieved within a fortnight.

Opacity or Whiteness of the Drum of the Ear.

By the methods I adopt for examining the state of the auditory passage, I am very easily enabled to see this fine membrane called the Drum, and, from reasoning, founded on a knowledge of the anatomy of the ear, and also from actual dissection, I can confidently assert, that there is no opacity, or thickening of this membrane, which the external application of the solution of lunar caustic can possibly remove. That this membrane does assume an opaque appearance is very true, but it is occasioned by a species of mucus, which is lodged in the cavity immediately behind, and which softens and renders it opaque in the same manner as a piece of bladder would assume that appearance from being sodden in water. No external or topical method can effectually remove this substance thus accumulated; and the only reasonable mode of proceeding, is to excite the action of the absorbent vessels, which, it must be evident to the meanest capacity, is a process that requires considerable time and perseverance.

## Electricity and Galvanism

Are particularly applicable to the cases last mentioned: for these powerful agents stimulate the absorbent vessels to increased action, if continued daily for a considerable period. The expense and loss of time to persons in the middle ranks of life, conse-

quent upon giving this mode of treatment a fair trial, the inconvenience to those of the superior classes, of attending practitioners in this department, of whom there are but few in the metropolis, who probably reside at a distance from the patient, the difficulty of getting the operation performed at all in the country, where there are no electricians, except in some large cities, and the risque attending upon too sudden exposure to cold air, after the sensible and insensible perspiration has been so much increased by the process, are considerations which have induced me to recommend patients to hire, or otherwise obtain an electrical machine, which is of sufficient power to give out very dense sparks. Let the patient be placed on the stool with glass legs, let him hold in his hand a wire,

or chain, which is attached to the conductor of the machine, and then let the electric fluid be drawn by means of a long wooden point from the parts surrounding the ear, for about ten minutes on each side. This gentle mode of proceeding will inspire confidence in the patient, and, on the second application, he will not be alarmed at having minute sparks drawn in like manner from the protuberant bone behind the ears, with a kind of blunt point made of ivory, and afterwards with a very small ball of metal; this should be repeated at least once a day, and in many cases twice, guarding cautiously against taking cold.

Galvanism may also be very usefully employed in these cases, and is so easily performed, that any person may apply it.

Where there is want of energy in the di-

gestive organs, which is a very common symptom in most occult cases of deafness, either electricity or galvanism in a mild form may be successfully applied to the region of the liver, the stomach, &c. But patients should, on no account, allow shocks to be administered, as they frequently occasion considerable mischief, of which I have seen many examples; and, amongst others, that of a poor man who was sent to me by Sir Astley Cooper. On inquiry, I was told that, being deaf, he had been attracted by the advertisements of an electrician, who pretended to have some new method of applying electricity: after a few visits, the operator passed powerful shocks through the patient's head, which not only increased his deafness, but he has never been able to attend to his business since, and, although every reasonable method of treatment was tried, he remains incurable.

## Embrocations rubbed on the Mastoid Process.

The mastoid process is the protuberant bone behind the ear, which is filled with a great number of small cells. These I have found, on dissection of the heads of deaf persons, to be filled with a caseous substance more or less solid, from whence, during life, viscid secretions, no doubt, passed down over the internal side of the ear, and, filling the cavity beyond the drum, caused obstruction of the Eustachian tube. It is very reasonable, therefore, to conclude, that this opacity of the drum of

the ear, is occasioned by the vitiated secretions from the mastoid cells; and, with a view to increase the action of the absorbent vessels, I have directed electricity to be applied to the mastoid process. I also advise embrocations to the part in these cases, and am satisfied, from experience, that they are far more beneficial than

#### Blisters,

Which are prescribed by most surgeons in the country, and some London practitioners, for every species of deafness, without the least consideration as to the nature of the case. And it is very probable, that most of these persons, who thus needlessly torture their patients, would be very much at a loss to give an explanation of

the symptoms which induced them to advise blisters, or even to assign a reason why they are applied upon that part of the body. The application of them, was no doubt, at first intended to be on the mastoid process, but the original reason for their application, and even the part on which they ought to be placed, if applied at all, appears to be forgotten; for patients are merely told to place a blister behind each ear, and they, being desirous to follow the directions given, press it as closely as they can, immediately behind the cartilage of the auricle.

When patients labour under general debility of constitution, and the case, for want of some other term, is by some called nervous deafness, common sense points out, that blisters are not only

very improper, but even injurious; yet, these are the cases to which they are generally recommended. I have related some instances in the Aurist, No. III. p. 80. Many have since presented themselves. I shall here, however, only mention three of them.

A delicate young lady, who was acquiring perfection under one of the first masters as a performer on the piano-forte, and has since made her *debut* with complete success, was condemned, by a gentleman (who, as I learn, adopts this vesicatory system to almost every patient) to be blistered for six weeks, and to swallow blue pills, with black doses at intervals, reporting the progress to him personally, every other day. Alarmed at the plan proposed, she mentioned it to the family sur-

geon, who advised her to consult me, and, in a few visits, her hearing was restored, without the least pain, or an hour's confinement.

Another, a young lady, allied to a very ancient noble family, consulted me about four years ago, on account of a slight diminution of the sense of hearing: the case did not admit of complete relief, but I pointed out a method of treatment, which she could adopt herself, and which would prevent the deafness from increasing. I heard nothing from my patient until recently, when I received a note, requesting an appointment to consult me; on seeing her, I found she had been attracted to London by the advertisements of the same practitioner, whom I mentioned in the last case. He had caused her to be blistered until the

neck was so much tumefied, that she could not turn her head, and the deafness was much increased. It was a week, or ten days, before I succeeded in restoring her to the same state as when I had formerly seen her: and I then advised a return to the family seat, and a continuance of the same mild methods of treatment which I had before recommended; this advice was, with the most grateful feelings, immediately adopted.

The third case is also that of a young lady, who consulted me a few days ago. She had been this same gentleman's patient for two years, and, during that period, had been blistered and mercurialized repeatedly. He, in imitation of the eccentricity of an eminent well-known practitioner, advised her "to read his book:" a

piece of advice, I understand, he has lately given very generally, although it is well known that every thing original in the "Book," is claimed by a person who states, that he was paid, in part, for compiling the work, but not being paid in full, he betrayed the secret.

#### Setons

Are also as absurdly advised, when the cases evidently shew, that debility of constitution is the chief characteristic of the complaint. Fortunately for themselves, however, there are not many persons who will submit to this operation; and, of those who have done so, I never either saw, or heard of one person who was at all relieved by it; but, on the contrary, I have known erysipelatous cruptions of a very troublesome and

dangerous nature, annoy the patient for a considerable time; and, in a recent case that came under my notice, they acquired such virulence, that the very existence of the person was, with difficulty, preserved.

#### Moxa.

This is a modification of the actual cautery, which was formerly prepared from the down of the China mugwort, made up into small cones; these were attached to the part on which they were intended to be employed, then fired at their point, and left until they gradually burnt down to, and cauterized the flesh. A better method was some time ago shewn me by that very able surgeon, Mr. Guthrie, in which cotton wool rolled up is used, by mean of a

small tripod and blow-pipe: in this way, any degree of heat can be applied with great facility, and precision. The flesh is not cauterized, but a stimulative effect is produced, which lasts for a considerable time, and the sensation can scarcely be denominated pain.

I have applied this modification of the moxa to the mastoid process, in some cases, with considerable advantage to the patient, and the reports from France, are also favorable to the further employment of it.

# Perforation into the Mastoid Cells.

ABOUT 200 years ago, this operation was recommended by Riolan. Valsalva mentions the case of a gentleman, who, having

a caries of this portion of the temporal bone, the liquids that were injected, passed down through the Eustachian tube into the back part of the mouth. Dr. Jasser, a Swedish Physician, about the middle of the last century, had a similar case, and, finding that the patient obtained his hearing on one side, he made an opening by means of a trocar, and produced the same effect on the other side. With the exception of this person, it has never proved successful: there have been many attempts made to afford relief by this method, every one of which produced very distressing, and dangerous symptoms. I have not been able to trace, whether it has, or has not, been performed in England; but I have heard from many patients, that they have been solicited by country surgeons to allow a small opening to be made behind the ear, by which, I suppose, it was intended to perform this operation. Persons should be very cautious that they do not allow any such experiment to be tried on them, as it proved fatal to Dr. Jean Just Berger, Physician to the King of Denmark, who died, in 1791, a victim to this operation.

Injections into the Eustachian Tube by way of the Mouth.

THERE are so many cases of deafness, which are reasonably supposed to be occasioned by obstructions in these passages, that it has engaged the attention of scientific men, for a great number of years, to discover some effectual method of removing

these collections of mucus, &c. from the internal parts. I shall, in the subsequent pages, mention the methods which I have found successful:—but the object of the following observations, is to shew, the absurdity of pretending to effect the purpose by way of the mouth. This plan has been lately forced upon the attention of the public, so much in this country, by an Aurist, who advertises that he has adopted it, and finds it very successful, that it is necessary to say a few words upon the subject. It is stated by him, that the " Sieur Guyot of Versailles" invented an instrument to cleanse these internal conduits, by passing a tube, by way of the mouth, to the fauces, and thence into the gutteral orifices of those passages leading to the internal parts of the ear. The fact

is, that the original proposer of the operation is unknown, and the plan itself was very deservedly forgotten, until Guyot, who was very deaf, endeavoured to inject liquids into the Eustachian tubes by way of the mouth. The subject was brought under the notice of the Royal Academy of Sciences at Paris, and the report made upon the subject was, that he had not reached the Eustachian tubes at all, that it was totally impracticable to reach them by any instrument passing through the mouth of a living subject; and, as to the abatement of Guyot's deafness, which he considered had taken place, he was trying other remedies, at the same time. Even if his deafness had been cured by the operation, seeing, as every anatomist must do, the impossibility of reaching the Eustachian tubes by this route, it was effected by the injection into the upper part of the throat, and my plan which I shall mention under its proper head of gargles, is far more certain, in point of success, and not unpleasant to use.

From the imposing name of the "Sieur Guyot of Versailles," those who are unlearned in these matters will be inclined to imagine that he was a surgeon or anatomist, or at least a man of some rank.—He was, indeed, totally ignorant of both these branches of science, but nevertheless was a man possessing considerable notoriety, and very creditable for a practitioner to quote as his authority, since Guyot was merely the post-master at Versailles.

Injections into the Eustachian tubes by way of the Nose.

It is generally supposed that the late Mr. Wathen, was the first person who performed this operation, but a Mr. Cleland, about the year 1740, was the first on record in England who attempted it. Antoine Petit, in the edition he has given of Palfin's Anatomy, 1753, recommends this plan, but does not name Cleland. About the same time, Mr. John Douglas, in this country, demonstrated in his lectures, that a bent probe might be passed through the nose into the Eustachian tube, but it does not appear that Mr. Douglas ever performed it, except on a dead body. Mr. Wathen acknowledges that he was

indebted to Mr. Douglas for the hint, which he put in practice on the living, in several instances, and has decidedly left the best account extant on the subject. Since Mr. Wathen, I do not find that any person in England has attempted it, except myself: I have frequently performed the operation, but at the best it is very unpleasant to the patient, though not at all injurious; it might be rendered less unpleasant, if a flexible tube could be made which would retain the proper and necessary shape. M. Itard considers it is useful, and has adopted some new methods of keeping the silver tubes in their place by a fillet round the head, with a branch which comes down over the nose. From the experience I have had upon this point of practice, and witnessing the difficulty of

overcoming the fears of patients, I do not think it can ever be brought into such general use as to give it a fair trial, and even if that could be done, an equal, if not more decided advantage, may be derived from the use of

# Gargles,

Formed of different liquids, according to the nature of the case. But, in order to render any of them effectual, in consequence of the position of the orifices of the Eustachian tubes, the patient must lie upon a bed, or sofa, quite in a horizontal posture, whilst using the gargle. I frequently observe, since my publications have appeared, that both London and country practitioners prescribe the same substances

mended, but they have in almost every instance forgotten, or not understood, this very necessary direction as to the manner of using.

## Tobacco Smoke

Has also been recommended (upon the authority of the late Mr. Grosvenor, of Oxford) to be held in the mouth, and, by closing the nostrils, it is to be forced into the Eustachian tubes. As I have given the full particulars of this method of treatment in former works, I shall merely say here, that I never heard of even a solitary instance of permanent benefit being derived; but I have seen many where it occasioned much mischief, and I have re-

of sudden death from using it. As concerns Mr. Grosvenor, I believe he was, for a considerable time previous to his death, quite as deaf, if not more so, than he was before he tried the application.

Some people having heard of tobacco smoke as a cure for deafness, but not knowing how it was to be applied, have had it blown into the external auditory passage, this method has been as inefficacious as the other, although not so dangerous.

# Touching the Tonsils with Caustic

Is another operation, which is continued by some practitioners for many months successively; but how it can be reasonably expected to prove useful, I am at a loss to imagine. It is, I presume, adopted upon the principle of counter-irritation, to cause a derivation of the mucous secretions that are supposed to obstruct the Eustachian tubes. To any person possessing a very moderate share of physiological, and anatomical knowledge, the operation must appear absurd, for the tonsils lie so very considerably below the orifices of the Eustachian tubes, that no benefit could be derived upon the principle of counter-irrita-Indeed, if the parts were much nearer to each other, there is no reason for supposing that, by causing diseased action in those glands which are destined to form a particular secretion from the blood, any material effect could be produced upon a part totally distinct in its office, which is chiefly that of serving as a conduit for air, whereby the drum of the ear is allowed to vibrate. Experience is, however, far beyond theory, and I am confident that no person who has ever been subjected to the process, either did, or could receive benefit; though in some cases it has been varied, and the throat has been tickled with a brush or feather, dipped in solution of caustic, during a considerable period of time.

This plan must, however, have been extremely absurd, when adopted as it was, during above six months in the case of a young gentleman from Southampton, who had a polypus in his ear, which I afterwards extracted, and sent him home well in a week: this occurred four or five years ago, and he continues well to this day.

#### Masticatories

Are stimulating substances which, as the name imports, are to be chewed or held in the mouth. They are of very ancient origin, but are, like the last-mentioned operation, of little or no utility.

## Sternutatories,

Or substances, mostly in the form of powders to snuff up the nostrils, are, in many cases of deafness, very serviceable, particularly when it is recent, and occurs through slight obstruction of the Eustachian tubes from catarrhal affections. I have seen many persons who had these symptoms after bathing, probably from not drying

their heads sufficiently, and to these cases dry, and stimulating vegetable powders in small quantity, drawn into the nostrils by a sudden inspiration of air, has proved peculiarly beneficial.

Empirics, in consequence, advertise ear and eye snuffs as patent medicines, and, under the protection of a stamp, sell most injurious, and dangerous compounds of mercury, powdered glass, and other substances highly irritating to the pituitous membrane lining the nostrils, which, from the extreme excitement they produce, have, in many instances, proved fatal to persons of plethoric constitutions. Indeed, no practitioner should prescribe any of these remedies, however innocent in themselves, without taking into considera-

ncss of the blood-vessels of the head.

### Medical Treatment.

Above eight years ago, I pointed out in an Essay on the Ear, &c. that medical knowledge and treatment were absolutely necessary in order to cure or relieve a great proportion of those cases of deafness for which no visible cause could be discovered. I have never had reason to change that opinion; on the contrary, it is confirmed more and more by the experience of every succeeding day. It would be impossible to give such directions upon this head, as could be suitable to each case. In the " Address to Persons afflicted with

Nervous Deafness," and in the "Aurist, or Medical Guide for the Deaf," I have endeavoured to give general instructions for the use of gentle medicine, and mild applications, to assist the efforts of Nature. These methods of treatment, I find to succeed in cases before deemed hopeless, and which would have remained so, had violent topical remedies been continued.

Treatment of Deafness by general Surgeons.

GENERAL practitioners in the higher and most respectable ranks of the profession, who have every opportunity, as well as talent, for the acquirement of knowledge, candidly admit, that they do not know any thing respecting the diseases of the ear;

and, in consequence, feel it no degradation to send a patient, or even their own family, to an aurist, or oculist. But those in the lower walks of the profession, and many surgeons in the country, attempt to treat cases of deafness of an occult description, in some obsolete, or improper method, and often injure the organ of hearing so materially, that the case is rendered incurable. Some of these gentlemen having relieved deafness occasioned by hardened wax, imagine themselves aurists, and, as I learn, they have talked about perforating the drum of the ear, the mastoid cells, &c. and have applied blisters, or inserted setons, whenever they could meet with patients simple enough to allow them to do so, or to ruin their constitutions by administering calomel or blue pill. Physicians in

the country, and most of the respectable order of surgeons, act in the same liberal way, as the higher orders of the profession do in London. There are, however, surgeons to be found in all parts, who would sooner keep a patient under their hands for years, than have honor enough to confess their own incapacity, by allowing another person of more experience, to relieve the malady which they do not know how to treat properly. This kind of conduct seldom succeeds for any length of time, of which I have seen many examples. One which now occurs to my memory will suffice. A lady of rank had been three months under a country surgeon (who attended the family) for an affection of her ear. At the end of the first three weeks, she had proposed to him to send for me; he assured

her, however, that he should be able to effect a cure, and lulled her, from time to time, with the hopes of completion. At the end of ten weeks, during which time she was confined to the house, she dismissed her surgeon, and I was requested by her to attend, when, by the use of proper remedies, and, in the short space of ten days, she was perfectly well. This satisfied her so fully of the incapacity of her former medical attendant, that she never suffered him to attend herself, or family afterwards.

#### Diet

Is also very necessary to be taken into consideration: whenever disease or derangement of healthy action occurs ge-

nerally, or in any particular part of the system: Even to keep the body in a state of health, temperance is of the utmost importance. Amongst the most uncivilised part of mankind, who experience little more of what we call comforts, than the savage beasts in their native woods, the senses of hearing, seeing, and smelling, are enjoyed in the greatest possible perfection. It is our artificial modes of life, our luxuries and vices, that render us the victims of disease, either general or local. Therefore, when we become afflicted, abstemiousness in diet is strongly recommended by every professional man. In diseases of the ears, when singing, or pulsatory noises are amongst the symptoms, which, after careful examination, are not occasioned by the state of the external

auditory passage, too much care cannot be observed in regard to modes of living, the digestion, and exercise. As to the food, it should be plain, and not high-seasoned. The periods of the meals should not be too far apart, neither should the patient eat-to satiety. The food should be well masticated: wine, spirits, and all fermented liquors should be used very sparingly, or, what is better, abandoned gradually. The shirt collar and neckcloth should not be tight. I was consulted by a gentleman of rank about three years ago, just before he departed on a foreign embassy, and the noises in the head, for which he chiefly consulted me, were constantly increased by the least additional constriction round the neck.

The reason of this is plain and evident:

the heart is continually propelling the blood through the arteries to all parts of the body, and particularly to the head; but the veins having no such power, the due return of the blood is prevented, by causes which would present but very trifling obstructions, if opposed to the power of the arterial action, -want of tone in the digestive organs, not only occasions mechanical obstacles to the proper circulalation of the blood through the larger, but also congestion in the finer vessels of the head, and thus produces those noises in the head and ears, of which I have before spoken.

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# The Influence of the Passions on Health

Has always been acknowledged, and acted upon by the medical profession, from the most early periods of history, or even as far back as tradition can carry us. The talismans and amulets of past ages, the charms still given by old women for curing ague, &c. in the present day, and all the superstitions which have been invented by fear, folly, or phrenzy, from the commencement of the world, that exist even among the most savage tribes, and by means of which the more artful, and unprincipled part of mankind have led, and still lead captive, the senses of the greater portion of the human race, are entirely to be attributed to the excitement of different passions, or modifications of them, in the mind.

I have been consulted on several cases of deafness, which had come on suddenly in consequence of unexpected, and alarming circumstances having occurred, which excited violently the passion of grief; and I have observed, that a continuance of extreme sorrow, seldom fails to occasion diminution of hearing, and an excessive state of nervous irritability. The deafness may then, with much reason, be termed nervous: and, although difficult to cure, it is often susceptible of much relief.

I have frequently had patients, who have fainted before I touched them, having anticipated that they would experience some severe pain, the *fear* of which overcame their minds.

This will not be matter of astonishment to any one who refers to the ingenious Dissertation on this subject, by Dr. William Falconer, of Bath, for which he was rewarded by the Medical Society of London, with the Fothergillian Medal. This Dissertation was published in 1788, and refers to many of the ancient authorities in corroboration of his positions, whereby it may be seen, that the mind has such influence over the functions of the body, that almost every disease has been cured, and even death has been caused, by the influence of the passions alone.

Some persons, who profess to treat diseases of the auditory sense, appear to be aware of the advantage of keeping hope alive in the minds of their patients. They, at least, shew themselves desirous of try-

ing the effect to be derived from such a stimulus, be the cases whatever they may. For I have known instances where promises of a certain cure have been most liberally given during many months, although every reasonable, and honorable man must know, that the cases were totally hopeless.

Although I thus freely condemn the cruelty of exciting expectations of a speedy and certain cure, in cases where a cure is impossible, yet many patients prevent or retard the successful termination of their own case, by giving themselves up to despair.—These desponding feelings should never be encouraged, by the relatives or friends of the patient, as the irritability of the nervous system is thereby much increased, and the methods of treatment,

which, it may be requisite for the patient to attend to, are either neglected, or carelessly performed.

## Mercury

Was recommended by the late Mr. Saunders, in cases of deafness, when there was no apparent cause for the complaint. He, professed to have discovered by accident, that this mineral poison relieved a case of deafness which he considered nervous; he therefore, exhibited it in several subsequent cases, the results of which induced him to extend its use to about 1200 patients. Of this number, only six persons were supposed to have received benefit, and even these cases were, according to his own report, of such a nature, that they could only

be cured by mercury, for the deafness was not a primary disease, but a symptom produced by other affections of the system. Mr. Saunders, some time previous to his death, gave up the practice altogether, chiefly, as it is believed, from disappointment and vexation, in not realising those hopes which he had held out to the world, that mercury and the antiphlogistic treatment, afforded a certain cure for nervous deafness.

It is singular that Riverius, who lived nearly 200 years before Mr. Saunders, mentions, that previous to his time, the same accidental discovery was made in precisely the same manner. The idea will naturally arise, that Saunders was indebted to Riverius for that discovery, of which he has assumed the merit, if any

ever existed. It would have been a happy thing for the deaf, if this baneful mineral had never been introduced into practice for any affection of the head or ears, which it seldom fails to increase. Persons whose deafness is but trifling, are frequently advised to take mercury. Noises in the head are, nine times out of ten, the consequence: and, it is fortunate for them, if they escape so easily; for I have had cases presented to me of the most distressing nature; amounting almost to a deprivation of reason, though the deafness previous to the administration of this medicine, was but triffing.

A clergyman, at the head of a large public establishment, had been thus mercurialized by a surgeon in the city, for a slight deafness: he was, in consequence, almost distracted with incessant noises in his head, and, I believe, followed my plans of treatment above three months, before he was freed from the dreadful annoyance.

A young gentleman was brought to me a few months ago from Dublin, who, through having mercury administered to him, is not only totally deaf, but has also become deranged in intellect, and obliged constantly to be attended by a person from one of the lunatic asylums.

Further remarks may be found in "Observations on the Improper Use of Mercury in Cases of Nervous Deafness," and in the abstract of the curious memorial presented by Dr. Halliday to the Directors of the East India Company. See Aurist, No. II. p. 40.

A gentleman was introduced to me some time ago by a physician, in order to his receiving my professional advice and assistance. This patient, upon every little derangement of the digestive organs, had constantly, without the sanction of medical advice, resorted to the use of calomel, or blue pill. After a time, noises in the head and ears began to trouble him: these were succeeded by fits, which, being supposed epileptic, the nitrate of silver (lunar caustic) was prescribed. This medicine cured the fits, but left the patient indelibly tinged, like a kind of bronzed figure, of which there are many examples. The deafness and noises in the head, have rendered the remainder of his existence miserable, as not the slightest hope could reasonably be offered.

Yet, with numberless instances of the evils attendant on the exhibition of this mineral, we have still practitioners who, not only prescribe it in almost every case of deafness, but even pretend that they cure the deaf and dumb by means of it, joined with other antiphlogistic treatment. Patients, on finding themselves worse in consequence of following the directions of any medical man, cease to visit him, and consult some other person; but, from false delicacy, they never acquaint the former practitioner with the true state of the case, and he, prepossessed with a favorable opinion of himself, and his own methods of treating the complaint, concludes his patient is relieved, and no longer needs his assistance. Thus, the evils attending the exhibition of this medicine, are, in a great

measure, to be attributed to the supineness of patients, who have suffered by it: for I am perfectly satisfied, that if practitioners were only to receive letters from their unfortunate patients, expressing one quarter of what they frequently tell to others, no man would be such an enemy to himself, or mankind in general, as to pursue the plan any longer.

# Iodine

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Is a substance obtained from the mother-water, formed in the preparation of soda, from sea-weeds, which, being mixed with sulphuric acid, iodine is obtained by the process of sublimation, in the form of small grey crystals. It was discovered, in 1813, by M. Courtois, and was first used in

medicine with great success in the cure of bronchocele, more commonly known by the name of goitre, or Derbyshire neck. Iodine has also been found useful in scrophula; indeed, it was at first considered a complete specific.

Dr. Manson, of Nottingham, has very recently published a work to elucidate its effects; he administered it to a patient affected with bronchocele, who was also deaf, and it cured both these ailments. He afterwards exhibited it in various cases of the same nature, and considers that it will prove very beneficial in deafness, occasioned by stoppage of the Eustachian tubes, whether produced by slight attacks of scarlet fever, inflammatory sore throat, measles, syphilis, or scrophula. Dr. Manson, calls upon professional men, who have an

extensive practice in cases of deafness, to give it a fair, but cautious trial.—Dr. Gairdner, previously published an account of the effects of iodine; he is very urgent in advising, that its effects should be constantly and cautiously watched.

A distinguished medical gentleman, now retired from practice, told me, that he had taken iodine with a hope, that it would relieve tic douloureux, but it failed in doing so.

The lady, whose case I mentioned under the head of "Contraction of the Auditory Passage," never suffered from any derangement of her general health, either whilst taking it, or up to the present moment. But I quite agree with all those gentlemen who have written upon the subject, that it should be prepared with great che-

mical precision, prescribed cautiously, and its effects carefully watched, as it is a medicine capable of exciting great increase of action in the absorbent and lymphatic system. I have several patients, who are giving it a fair trial, and I shall feel very much gratified in being able to confirm Dr. Manson's favorable report. There are many patients whom, from honorable feelings, I have formerly been obliged to dismiss as incurable, but to whose cases this medicine appears very applicable.

Oils, &c. dropped into the Auditory

Passage.

Preparations of various descriptions are very commonly recommended to be ap-

plied in this manner, by country surgeons, or apothecaries, and sometimes by chemists, and the lower grade of medical men in the metropolis. The membrane, called the drum of the ear, is placed in an inclining position; the lower part of it receding inwards, forms, with the obliquity of the external auditory passage, a kind of acute angle, into which these oleaginous, and other liquids descend, when dropped into the ear. If they are even quite free from stimulating, or acrimonious properties, they form a mechanical obstruction to the proper vibration of the drum of the ear, and thereby increase the deafness: but, if they possess such properties as occasion pain, it is by exciting inflammation, and ulceration of this fine membrane; and thus purulent

discharges are frequently excited, which continue for months, or even years.

Yet, I have been occasionally obliged to recommend, though much against my inclination, this mode of application, in the cases of children, who would not allow any other method to be adopted; and, in the cases of poor people, whose time is of great importance, or excessively nervous, and ignorant persons, who could not be entrusted with safety to apply the liniment with any instrument, or even with a camel's hair pencil. But I have always endeavoured, in some measure, to obviate the evil, by directing only about three or four drops of the liquid to be used at a time, and each drop to fall on a different part of the side of the passage; that it might thereby become as much diffused as possible; and occasionally syringing the ears at intervals, of two, three, or four weeks.

I have a patient, who has a perforation of a fistulous nature in the drum of the ear, and who hears quite well, when a single drop of thickened oil is let fall directly in the centre of the auditory passage, whilst his head is reclined on a table. This effect, so caused, astonished me at first; and it was some time before I could satisfy myself as to its operation. By repeated examination and experiment, I discovered, that when the oily liquid stopped the small round orifice which was in the drum of the ear, he heard distinctly, but that, as soon as the orifice became again opened, his hearing was nearly lost, I found that the oil closing the orifice, made the drum of the ear capable of receiving,

and communicating the vibration occasioned by sound, and thus produced the effect.

Remedies used by Patients, even under Surgical Directions.

LINIMENTS, and other preparations, are often recommended by myself, and, I presume, by other professional men, for patients to apply, by means of cotton-wool twisted on an ear-pick, or small silver instrument. These oily liquids they frequently introduce into the auditory passage too profusely, and thereby defeat, in the manner I have just pointed out, the very purpose for which they were prescribed. It appears to me, an operation of such extreme simplicity to form a dossil of

cotton wool, and introduce it into the auditory passage, I have generally sent patients away to do it for themselves; particularly after having heard from one patient, that he had attended a practitioner every, or every alternate day, for several months, to have his ears stopped with scented cerate; and, from another, that he had submitted, for the same length of time, to have his throat tickled with a feather, dipped in solution of caustic, or a few drops of the same preparation put into his ear; with a variety of similar statements, made in language of much asperity. From fear, therefore, of being classed with operators of this description, and, I trust also, prompted by honorable feelings, I have dismissed patients with a prescription and ample directions how to use

it. It has not, however, in many instances, proved so satisfactory as I could have wished, either from too large a quantity of the preparation being used, or, from a want of the necessary degree of manual dexterity. In proof, that it must have been one or the other of these causes, I have absolutely, afterwards, completed the cure with the same liquid, which, applied by the hands of the patient, had failed.

#### The Fees.

I no not know a more unpleasant part of the intercourse, between patients, and professional men, than when pecuniary matters are the subject of conversation; I think, therefore, that I shall be rendering an acceptable service to the public, and to my medical brethren, by a few observations on this point.

Gentlemen, in the profession of the law, such as counsel, &c. are very differently circumstanced from physicians and consulting surgeons. A case is sent to counsel, in writing, on which the fee is marked, and paid to the clerk who attends the chambers, with a gratuity to him even for receiving. The fee is, generally, according to the length of the case, and the answer is expected to be proportionate to the fee.

Gentlemen, in the profession of physic, or surgery, whose education is equally, if not, more expensive, and who, to acquire eminence, must have studied much, and be men of scientific attainment, are frequently

subjected to the humiliating question, " Pray, Sir, what is your fee?" I have remarked, that this is, in most instances, as unpleasant to patients, as it has always proved to me, and I doubt not, is to others. I shall, therefore, proceed to state, what is the regular, and usual custom, amongst consulting surgeons, with whom may be classed aurists and oculists, viz. a guinea on the first visit for an opinion on the case, let the case, or opinion, be what it may; but when the consultation takes place by special appointment, or occupies a considerable portion of time, medical, as well as legal men, expect a proportionate fee. Afterwards, a guinea every visit, except when the case is of such a nature, as to require frequent, and long-continued surgical attention; or the patient is in the middle ranks of society, and attends at the residence of the surgeon, during the usual hours, which he may have fixed for receiving any patients who call on him for relief, without making any previous appointment; in these instances so excepted, a guinea is paid every alternate visit. When surgical operations are necessary, they are not included in these regulations. If the surgeon visit the patient, the fee is always a guinea every visit, without any exception, provided it be within two miles; if the distance is beyond two miles, two guineas each visit; three guineas, if four miles; four guineas, if eight miles; five guineas, if twelve miles; and so on progressively. When the attendance of a medical, or surgical practitioner is required at a distance, by a stranger, for

obvious reasons, a fee in proportion, is expected to be inclosed, with the request for such attendance. As to the poor, they can obtain gratuitous advice at stated times, by producing a letter from some respectable householder, or medical gentleman, certifying, that the applicant is unable to pay for professional aid. And those in the humble walks of life, yet, who are above being classed as paupers, never find want of feeling, a general characteristic of the medical, or surgical profession.

## Periods for Consultation.

Practitioners, in all departments of the profession, have certain fixed hours for being consulted at home, which is a matter

of great convenience to the public and themselves, and cannot be too generally known.

I have, for some time, fixed Tuesdays, Wednesdays, Thursdays, and Fridays, for my regular days, from the hour of one till four; and by this arrangement, I am enabled to receive patients, making previous appointments, or whose cases may require much explanation; I can also visit patients at their own residence, or in the country, even at a considerable distance. I am also generally, but not certainly, at at home most mornings until ten. Thus, by instancing my own, I illustrate the practices of other professional men.

Having received numerous invitations and solicitations from respectable persons in various parts of the kingdom, it is my intention to pay visits to different parts of the country occasionally, particularly at the latter part of the year. Due notice of such movements as are made by other members of the profession, in common with myself, is circulated as extensively as possible; in order that persons, who cannot spare either the time, or afford the expense of a visit to London, may have an opportunity of obtaining advice.

## Modes of examining the Ear.

Various have been the contrivances for examining the state of the auditory passage. Some persons trust to probing; this, however, is dangerous, painful, and uncertain. I saw a lady, lately, whose ear had been very much injured by the use of a probe.

Bent forceps are used by others, to dilate the auditory passage; this is also uncertain, and painful. The method I adopt, is to straighten the obliquity of the passage, by drawing the auricle gently upwards; then, by an instrument, which I contrived about eleven years ago, formed of a piece of stout silver wire, nearly in the shape of a Roman Z, one point of which is flattened, and is used to keep the small tongue, which covers the orifice of the auditory passage out of the way. I can, without the least pain, or possibility of danger, perfectly, and leisurely examine the auditory passage, and, in the majority. of cases, distinctly see the drum of the car.

## Proportion of curable Cases.

Persons afflicted with deafness, or diseases of the ears, will naturally be very anxious to learn the probability of receiving relief. I shall not pretend, as one person has done, that, of above six thousand cases, which have been under his blistering, and blue pill methods of treatment, nearly all have been completely cured; but I subjoin a plain statement of the last fifteen hundred cases of deafness, or diseases of the ears, on which I have been consulted. The patients were of various conditions in life, and of all ages, from 20 months to 85 years.

Cured	-	-	-	496
Considerably	relieved	-	-	380
Partially reli	eved	·		290
Result not known, some being still				
under treatment, and others hav-				
ing had prescriptions, on going				
into the c	ountry	-	-	210
Incurable	-	<u>-</u>	-	124
				1500

#### Ear Trumpets

Are, in most cases, injurious; and when the drum of the ear is in a relaxed or debilitated state, they are particularly so. The best of these kind of instruments is, one made in the shape of a small round bugle horn, which I suggested to Mr. Gow, 162, Regent-street; but, although it suits some

species of deafness very well, and occasions as little injury, or probably less than any other instrument of the trumpet kind, yet, the spoon-like instrument, or the caps to place over the ears, made by him in tin, japanned, and, also in silver, by Mr. Shepherd, opposite St. Clement's Church, in the Strand, answer, in other cases, better, and do not increase the deafness. I have not space here, to enter into a discussion of their accoustic action, therefore shall defer this part, until I publish some future number of the Aurist.

### Artificial Ears.

THERE have been many instruments of this description, brought under the notice of the public, but it requires a thorough

knowledge of the nature of the case, in order to decide which, or if any of these contrivances can assist in rendering the sense of hearing more acute; some of these artificial ears are manufactured in France, out of pasteboard, at a very trivial expense, and answer the purpose better than those made in this country, which cost a great price, and are very complex in the manner of fitting them on. In some old works on surgery, a kind of tube is recommended, which is to be introduced into the audiditory orifice, with a view to assist the sense of hearing.—If the sides of the auditory passage approximate so nearly as to close the entrance of it, a tube of this kind will serve to admit sound, and so remedy defective hearing, but, except in these cases, they cannot be useful.

I have had several cases, where this species of deafness, which had continued during the whole of a person's life, was removed, by having models of the ears taken under my inspection, from which silver tubes were made, which fitted the ear most accurately, and kept the auditory passages open, so that the slightest sound was conveyed into them, and thence to the drum of the ear.

## Flannel Night Caps.

Nurses, and even apothecaries and surgeons, sometimes recommend these; and, provided they are constantly worn during the attack of catarrhal affections, until the complaint has left the patient, they are very proper. But there is danger of a re-

lapse in leaving off the covering too suddenly.

In chronic cases of deafness, where the patient is in other respects in a good state of health, they cannot fail of proving injurious; for they are worn all night, by which perspiration is very much excited; and, before the patient leaves the bedroom, they are thrown off, and he walks through a cold passage, and currents of air, to the breakfast-room, with nothing on the head, thus subjecting himself to a change of temperature, which is quite sufficient to occasion disease even in a healthy constitution. Yet, he adopts this plan to cure a complaint already contracted. A moment's reflection, will serve to convince any one of the inconsistency of expecting to obtain relief by such means.

#### Thin Shoes.

Many ladies injure their general health, as well as render themselves deaf, in consequence of wearing shoes so very thin, that they cannot even step into a carriage without getting wet in the feet. The fashion, however, which seems to prevail, for wearing the French clogs, cork shoes, &c will operate more to remedy these evils, than all the advice that can be given.

## Application of Æther.

In the state of vapour, æther becomes hydrocarbonate gas, which is sedative in its effects, but at the temperature, I use, it is also slightly stimulant, and acts very dif-

ferently from the liquid itself, upon the parts to which it is applied. The vapour occasions no pain in the auditory passage, but has, in many cases, proved very serviceable. I have contrived a new and simple apparatus, for applying æther, formed of various chemical combinations, according to circumstances, to such cases as I conceive it may reasonably benefit: -Mr. Garden, No. 372, Oxford-street, makes and fits up these instruments, according to my plan. I have seen a gentleman, within these few days, who was, about two years ago, cured by it, and, whenever he feels the slightest attack, immediately resorts to the same application, which always relieves him.

## Abstraction of Blood from the Jugular Vein,

Is the most reasonable and efficacious method, when the noises in the head and ears are excessive, and, with other symptoms, indicate that there is great fullness, and even congestion in the blood vessels of the head.

## Cupping

Also under the ear, or on the nape of the neck, in some cases of deafness, and noises in the head, affords considerable relief, either when used with the scarificator, or by means of cupping-glasses, placed over the orifices made by leeches.

#### Popular Remedies.

Every old woman is prepared to advise some nostrum for most diseases, and none more frequently than deafness, for which a thousand "certain cures," and "most innocent things in the world," are constantly proposed; although, probably, nothing can be more injudicious or injurious for the case, to which these notable remedies are to be applied. However, if persons afflicted, will adopt modes of treatment without proper advice, they have only themselves to blame for the consequences.

Syringes of a proper and improper Construction.

WHEN there exists a purulent discharge, syringes are necessary to enable the patient to inject medicated lotions into the auditory passage; the common pewter syringes excite, or keep up irritation, besides, being very imperfect, and liable to injure the ear. I therefore recommend, in preference, the gum elastic syringes, which are quite safe for a patient to use, and are easily managed. Most surgical instrument-makers keep them, but I usually have employed Messrs. Asquith and Smith, turners, 10, St. Martin's-lane, or Mr. Weiss, instrument-maker, in the Strand, who has invented a new kind, with silver tubes,

which are not liable to get out of condition.

A practitioner has adopted a most singular plan of having common pewter syringes made: at the end of the tube, which ought to be inserted into the external auditory passage, it swells into the size of a small pistol bullet. This is intended (as I learn) to stop the orifice of the ear, and so prevent the liquid which is injected from escaping. Thus the whole pressure of the lotion, forced from the syringe, is sustained by that sensitive, and delicate membrane, the drum of the ear; and, instead of washing out whatever accumulation there may be in the auditory passage, no egress is allowed, according to this plan, for such collection of matter or wax.

This invention is, I believe, unique; but

tried by every principle of anatomy, or hydraulics, it is so superlatively absurd, that I need say no more upon the subject, to any reader who possesses a very moderate knowledge of science, or who has even a small portion of common sense.

A Whimsical Remedy proposed for Deafness.

When a diving bell descends, there is a condensation of the air within it, the moment it touches the surface of the water, and the persons inclosed in the machine, consequently experience an external pressure upon the drum of the ear for a short time, which is rather painful, until, by the air passing up the Eustachian tubes in the same condensed state, the equilibrium

is restored. The descent, it is pretended, has cured deafness, but there is no proof whatever of any such effect having been produced, neither is there the slightest scientific reason for supposing, that any such advantage could be gained from such a cause.

A practitioner, in the metropolis, some short time ago, advertised that he was the discoverer of a "new mode of practice, with regard to diseases of the ear, which consists in excluding air from the external auditory passage, and thereby occasioning the air to rush upon the Eustachian tube, upon the same principle as in the diving bell."

—The folly of this is pointed out in the Aurist, No. III. p. 85. There is no passage from the Eustachian tube, through the drum of the ear, to the external passage

sage, which is, according to his plan, to be stopped up every day, with scented cerate, as long as the patient chooses to submit to it: so, because a great pressure of air against the drum of the ear has, as it is pretended, cured deafness, the same complaint is to be cured by excluding air from the same passage! and, to complete the absurdity of the thing, it is further pretended, that the "plan has been successful in cases of atony of the nerves, or muscles of the ear, arising from cold, or other temporary causes."

A still more Whimsical Remedy for Deafness.

A PRINTED bill was recently placed in my hands, by a gentleman who had formerly

expended large sums in endeavours to regain his hearing. His case is mentioned in the " Address to Persons afflicted with Nervous Deafness," p. 27. He was so far restored under my treatment, as to be able to hear the chimes of St. Clement's clock, when seated in his office in New Inn; with which improvement I advised him to rest satisfied, as I did not think it could be carried further. I saw nothing more of him, as a patient, for above four years. Lately, some one advised him to consult a person, then a licentiate of the College of Physicians, and who, it was said, would restore him entirely.-My former patient was tempted to consult this person, and, from him, received the printed bill abovementioned, which is here literally transcribed.

# "General Directions for the Cure of Deafness."

"PROCURE a small badger's hair brush, and a piece of transparent soap, dip the brush into a cup of boiling water, rub it on the cake of soap, and wash the ears well with this each time before coming to have the ointment applied."

"Procure also a bottle of the Bethesda Pool Mineral Water. Wash every morning the ears with this, after using the common soap and water, and let it dry on.—Take also a wine glass of the Bethesda Pool Water night and morning, first adding to it in a cup a tea-spoonful of ginger in powder."

" N. B. The Bethesda Pool Water is

sold only by James Wylde, 173, Bishops-gate-street, and John Bell, 338, Oxford-street, chemists, and is not stampt, being the production, not of man, but of nature."

"These directions must be carefully attended to."

The gentleman who gave me this bill, told me that he was expected to attend every alternate day, during three months, to have the Ointment of Cabbage Stump (as it was said to be) applied: the process of performing which operation, he described more ludicrously than I shall repeat. He permitted himself to follow the plan for a fortnight, at the end of which time, he called on me; and whatever might have been the cause of his increased deafness, I cannot know, excepting from

his own remarks, but certainly he was nearly or quite three weeks my patient, before his hearing was restored to the same state, as when he formerly ceased to visit me.

I have been informed by this gentleman, and several other persons, that it is asserted, this water comes by the way of Aleppo, direct from Jerusalem, and is obtained by fresh excavations, and consequent discovery of the spring which supplied the pool in the sheep-market of that city, mentioned by St. John, chap. 5, verses 2 to 7; and that the angel is still so attached to it, that although the water is corked in bottles, and transported so far from its native spring, he regularly troubles it once a month, and that it is a cure for most complaints.—With persons who can swallow

this water, and the tale attached to it, the bottles themselves stand a very bad chance.

As to the excavation and discovery of the spring, which formerly supplied this pool in the sheep-market of Jerusalem, the most modern travellers, and best authorities declare, that even the site of the sheep-market is unknown.

With regard to the Cabbage Stump Ointment, it is, I am credibly informed, the common citrine ointment, formed of mercury, nitric acid, lard, and oil.

It is but justice, to the respectable house of Messrs. Bell and Co. to observe, that, as soon as they were apprised of the imposition attempted to be practised on the credulity of the public, they instantly discontinued the sale of this sacred water.

### Pretended and Itinerant Aurists.

Almost every city, and large town is visited, from time to time, by a succession of these doctors, who, with impudence, only equalled by their ignorance, delude, by their specious advertisements, not only the poorer country-people, but also many in the middle ranks of society. It is high time that some legislative enactment should put a stop to these nefarious practices, and to the evils which these impostors inflict, through want of skill, upon many families amongst the poor. But it is almost hopeless to expect any change, whilst government receive so much from the advertisements issued by these empirics, and whilst the country newspapers

are so materially benefited from the same source. Even Royalty itself has been imposed upon more than once, and made a medium for promulgating the names of some of the most notorious quacks to the world; which circumstances must be fresh in the recollection of the public.

As there is no branch of the healing art exempt from this invasion, it is natural to expect, that a part of practice so little understood, as the medical and surgical treatment of diseases of the ears, which, even in the metropolis, is disgraced with charlatanism, should, in the country, be liable to a still lower grade of quackery.—From many parts of the kingdom, I have received observations on this subject, which I have noticed in the Aurist, No. III. pages 66, 67, and 68, and have there given some

rules, whereby these deceits may be discovered. Amongst others, it may be noticed, that they positively promise a cure; and, before they begin their operations, they always demand a sum of money to be paid down, from five to ten guineas, producing proofs that they have had as patients, A. B. C. D. &c. &c. all of whom have been most wonderfully cured.

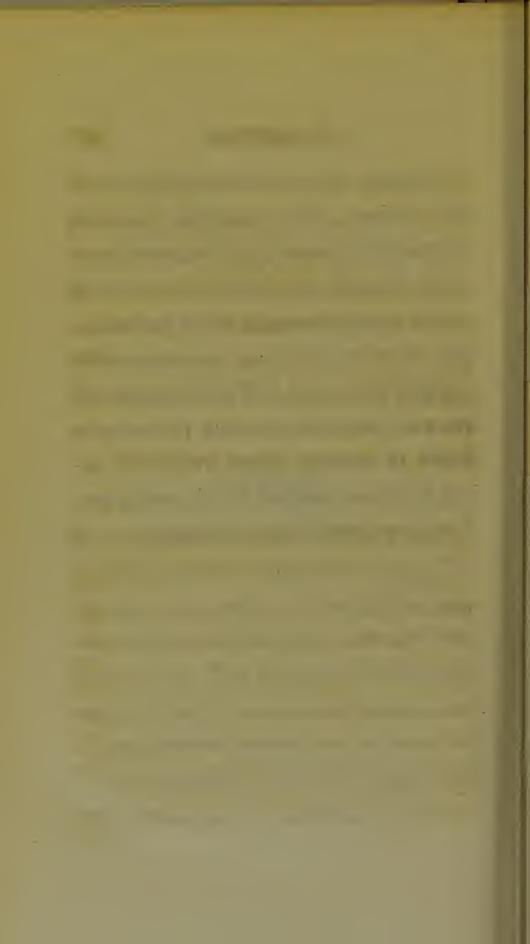
During my last visit to Bristol, I was informed that, within the preceding twelve months, three of these pretended aurists, independent of other notorious impostors, had made that city their temporary residence, to the great injury of many of the poor and ignorant, who are much to be pitied. Not so, however, the better educated, who have been dupes of these persons, and richly deserve the disappoint-

ment and evils which they may have experienced, because they ought to have
exercised more judgment and discretion,
than either to have been imposed upon
themselves, or, by their example, to have
encouraged their poorer neighbours to be
thus plundered of both health and money.

#### Conclusion.

IT seems, as if the credulity of mankind in general, is more displayed in regard to diseases of the organ of hearing, than any other affection of the body incident to the human race. Let a proposed remedy be ever so absurd, or mode of practice ever so inconsistent, painful, or injurious to the constitution, it will, for a time, find proselytes.

In future, let honor and integrity rule the conduct, and reasonable scientific treatment be adopted, by the practitioners in this department of the healing art, as well as in other branches of the profession. But, if patients will not exercise a little common sense, and will still become the dupes of charlatanic arts, and preposterous modes of practice, where irreparable injury is so soon received, I shall merely say, Vale!—qui vult decipi, decipiatur.



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